

## OUT OF AFRICA

Jonathan Porter tells the story of a remarkable young West African woman with a natural ability for aircraft and flying

## CAREER PATH



(Main) Patricia Mawuli about to go flying in Zenair 701 in Ghana.

ach of us has our unique story of how we 'got into the air', but Patricia Mawuli has an inspirational story that is certainly very different to any of us born in the UK.

Patricia does not know exactly when she was born because her birth was not registered, but it was sometime in the 1980s in the West African bushlands of Ghana, where under-five mortality is amongst the highest on the planet. Her father, a fisherman, died when she was just a few weeks old, and her mother, a 'head-load trader' was subsequently driven out of the village and Patricia was passed amongst family members to be cared for.

As is common in many developing nations, when a family has challenges a spiritual cause is sought – a child often being blamed for 'bringing bad luck'. Consequently, as a toddler Patricia was sent to be sacrificed (killed to relieve the family from a curse) at a local shrine. This is not as uncommon as we may think, even today. Unaware of why or where she was, but perhaps with an inbuilt survival instinct, Patricia toddled away, and was lost for a few days in the wilderness.

Finally, found by her paternal grandmother, she was taken in and cared for. As her grandmother worked in the fields she spent her days sat under a tree playing with sticks and drawing in the dirt where, despite the predominance of malaria, tuberculosis, schistosomiasis, snakes, scorpions, etc., she survived. Once in her teens she was sent to live at her uncle's farm near Akosombo.

Life certainly didn't get any easier though; she had to fetch water each morning, and ensure that the men folk were catered for, cooking on an open fire in the middle of the collection of thatched huts. At the end of each long day her bed was a straw mat on the dirt floor of a partially collapsed mud hut. In order to earn enough money to keep herself in school, she would collect firewood from the scrubland around the farm.

School was not a place of safety and comfort either. One of her teachers had a dream that Patricia turned into an owl and could fly. It was decided that this was an omen that she was a witch, and consequently she was locked into the local church overnight in an attempt to 'cleanse her'. Fortunately, she overcame such traumas and worse besides, but her childhood was not an abnormal scenario for a young woman from a rural area in Ghana.

Then, one warm, sticky, afternoon, whilst cutting wood with her machete, she spotted a small aircraft zooming towards her, on a collision course with her – or so it seemed. Thinking she was in trouble and that the aircraft (Above) At the Zenair's controls.

was chasing her, she climbed into a tree to hide. Suddenly, the engine roared and the aircraft climbed away back up into the sky, as it was actually carrying out a practice engine failure on a training flight. Patricia peered out of the tree and watched to see where the aircraft headed. A little shaken, but exhilarated and enthralled as she had never seen an aircraft close up before, she decided she would have to find out where the aircraft came from.

Off she set, and tracked the machine to a small airfield, where Jonathan Porter, a British national, had started a social-entrepreneurship using X-Air and Zenith aircraft, and established the Rotax Distributorship for West Africa. Dressed in a green sports top, a homemade wrap around skirt and flip-flops, Patricia asked if she could have a job. However, due to the cultural challenges of employing women in a male dominated culture, Jonathan simply said, *No, we do not employ women*, and turned on his heels to return to the work at hand.

Undeterred, Patricia called back *I will work* for free... Recognising that Patricia was not your average youngster, Jonathan picked up a machete and a pickaxe and said to her Here, take these and help the men clear those trees for the new runway. Not only did Patricia clear the trees – she did it better than the men. Within a few days, she was in paid

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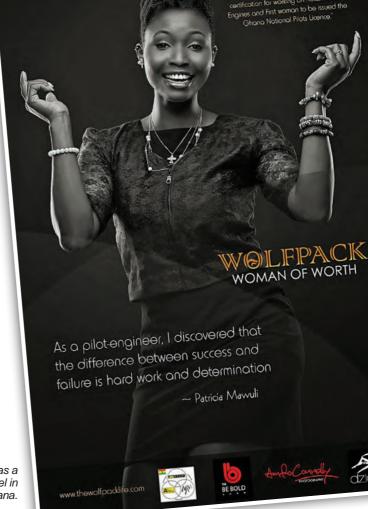
The sort of village Patricia comes from.

employment as a field hand on the airfield. Her luck was changing...

A few weeks later, as she was clearing undergrowth near the airfield workshop, a young male engineering apprentice was caught stealing and was sent to the local police station. Consequently, Jonathan needed an assistant for the task at hand and as Patricia was working nearby, he called her into the workshop to help. She demonstrated a natural engineering ability, with a practical approach to all things aviation, and remained as a helper in the workshop. She was constantly wanting to learn more, and so impressed was Jonathan that he arranged to meet her uncle to offer her an apprenticeship. Unfortunately her uncle made it clear that he did not approve of his niece's desires to learn about aviation and engineering - making it clear that she should return to the village, marry, cook and make babies. Patricia objected, and eventually ran away, avoiding a messy kidnap attempt by her own family members planning to send her to a remote village.

Recognising the strength of character in this young African woman, Jonathan sought legal support to restrain the family from forcibly preventing her from engaging in work at the airfield. Consequently, Patricia was provided with tied-accommodation at the airfield and commenced an engineering apprenticeship. Released from her pre- and post-work chores of fetching water, cooking and cleaning for her uncle, Patricia blossomed and was able to increase her aviation knowledge and ability, and even took to watching the Royal International Air Tattoo on DVDs in the evenings as her new accommodation had power and TV!

Her engineering skills grew, building upon her natural aptitude and an eye for precision. She learned to produce brackets from drawings, using snips, drills, and metal files,



oman in the world to recieve IRMT ation for working on Rotax Aircraft

Patricia as a role model in Ghana.

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Patricia is a qualified engineer on Rotax aircraft engines.

and to inspect her work with the appropriate measuring devices. The installation and maintenance of Rotax aircraft engines became one of her favourite tasks and she demonstrated a seamless affinity with airframes and engines, with both an eye and an ear for the Rotax 912. As a result Patricia was booked to go to Rotax HQ in Gunskirchen, Austria, as a representative of the Rotax Distributorship.

This created the need for a passport... and for that you need a birth certificate. Several months later all the necessary documentation was obtained and Patricia set out on an airliner for the first time in her life. She insisted on sitting by the window and was intrigued by the new and unimagined landscapes she saw. At Rotax she was the first woman to take part in their engineering training programme. Many of the world's distributors welcomed her... but others were sceptical, to say the least.

During training, the instructor asked for a volunteer to strip down and rebuild a carburettor and as if Moses had parted the Red Sea, a passage way opened through about 40 people for Patricia to walk forward and take up the challenge. Some made encouraging noises; others sniggered expecting a disaster. To everybody's surprise she stripped and rebuilt the carb perfectly, in record time. A murmur wandered around the watching engineers, astounded at this 'first time at Rotax' display. For Patricia though, it was normal – she was used to stripping and rebuilding carbs every 25 hours of operation, due to the poor quality fuel in Ghana!

At the end of the course, Patricia was awarded her certificate and became the first woman to hold a Rotax iRMT qualification, issued by Rotax. But she wasn't going to stop there...

On returning to Ghana, Jonathan offered Patricia a seat in one of the aircraft flying out of a 200 metre strip with trees at the end of the five metre wide runway. She grabbed the opportunity and climbed into the door-less cockpit of a Rotax 912UL engined X-Air F. With an air temperature of 35°C and density altitude of 3,500ft, even a STOL performing X-Air needs flying with attention to detail.

Patricia settled her feet on the rudder pedals and her hands on the joystick and throttle lever... just to follow-through. All checks done, Jonathan slid the throttle forward and held just enough back pressure on the stick to be able to feel the pulse of the airframe. After 40 metres the nosewheel lifted off; 65 metres and the mains parted company with the ground effect engaged as they accelerated towards the wall of trees ahead. At 45 knots, and gaining quickly, the engine happily roaring at 5,500rpm, smooth backpressure lifted the aircraft in a precise climb to clear the trees, with a few feet to spare.

Once over the trees turbulence spat at the wings... and at that point Jonathan said to Patricia *you have control*. Barely tightening her grip on the controls and with the same dexterity as she uses in the workshop, she simply flew. Jonathan issued commands such as ease back on the stick a few millimetres and reduce power to here, pointing to the desired setting on the tacho.

With the tips of her smile kissing each of her ears, the aircraft soon reached a cruising height of 2,000ft over the coastal savannah. As the destination airfield came into sight, Jonathan continued to talk Patricia through each phase of downwind, base leg, final, round out, flare and touch down... and she did it all perfectly. Perhaps it was just natural ability or had something to do with her intimacy with the engine and airframe from working with them... but it was a great first flight. That first flight was a natural stage in the development of Patricia's infection with aviationitis! Each day she would ask if she could accompany a ferry or test flight, or if possible go on a photographic mission. Her flight hours grew, as did her confidence, and she went on to become the first woman to gain the National Pilots Licence in Ghana (PPL-M equivalent).

Initially some of the officials in the country were somewhat dubious. One day the Civil Aviation Authority sent a team to inspect an aircraft nearing completion in the workshops, and during their visit Patricia took an aircraft out, prepped it for flight and took off. All the time the officials had been keeping an eye on what was going on and asked Jonathan if he was flying the aircraft by remote control! When she landed, the officials even went over to the aircraft to check for remote controls because they simply could not believe that this young Ghanaian woman was flying the aircraft herself!

Patricia went on to become a flying instructor, start an engineering school for girls and co-run a humanitarian aviation operation dropping health education materials into villages... and married Jonathan.

In 2015, due to changes in conditions for operating in West Africa, Jonathan and Patricia moved to the UK to head up the Rotax Aircraft Engine Division for CFS Aero, covering the UK, Ireland, Iceland and West Africa. She is looking forward to several speaking engagements in 2016 – promoting engineering and aviation as a viable career for young women. Those interested in inviting Patricia to speak at their club or Strut events can contact her via *capt.yaw@gmail.com* 

And to round off the story to date, on 13 January, Patricia presented Jonathan with their first child, 3.94kg Gwenevere. Congratulations to them both.